

Appl. No. 10/783,666
Amdt dated March 26, 2007
Amendment and Response to Office Action dated 12/26/06
Page 5 of 7

RECEIVED
CENTRAL FAX CENTER
MAR 26 2007

REMARKS

Claims 1-4 and 7-17 are pending in the application with Claim 1 being an independent claim. The foregoing amendment amends Claim 1 to clarify the invention and amends Claim 17 so that it conforms with the amendment to Claim 1.

REJECTION OF CLAIMS 1-4 AND 8-17 UNDER 35 U.S.C. 103(a)

The Examiner rejected Claims 1-4 and 8-17 under 35 U.S.C. 103(a) as being unpatentable over Nilsson (2001/0045322) in view of Inaba (JP 60-120214). Nilsson describes selecting the diameter of holes 9 so that the high-frequency energy from the exhaust gas flow is vented out and converted to heat by friction against the absorbing material 8 surrounding the perforated section 6a. Paragraph [0026]. Low-frequency noise is suppressed by adapting the lengths of the end pipe 6 and perforated section 6a and high-frequency noise is suppressed through the perforated section 6a. Paragraph [0024]. In contrast, in the present invention a main flow of exhaust gas enters the downstream pipe via its end portion. A secondary flow of exhaust gas enters the downstream pipe via the opening in the downstream pipe so that in the downstream pipe, the main flow and the secondary flow interfere in the expansion room with each other to reduce flow noise and discharge noise, while also preventing a pressure loss in the exhaust gas. Page 6, lines 4-22. Nilsson teaches away from the present invention since the exhaust gas flowing through the perforated section does not interact with another flow since there is no substantial flow through the perforated section while the energy is converted to heat by the absorbing material which surrounds the end pipe.

In rejecting Claim 1, the Examiner admitted that Nilsson does not describe that the opening in the downstream pipe is positioned in an axial direction between the end portion of the upstream pipe and the end portion of the downstream pipe or that an expansion room of the muffler body is partitioned into a first expansion chamber, a second expansion chamber and a third expansion chamber by a first baffle plate and a second baffle plate. The

US2000 0870833.1

Appl. No. 10/783,666

Amdt dated March 26, 2007

Amendment and Response to Office Action dated 12/26/06

Page 6 of 7

Examiner alleged that Inaba teaches these elements and that it would have been obvious to combine Nilsson and Inaba to "lower backpressure within the muffler and further tune the apparatus."

Fig. 2 of Inaba illustrates an upstream pipe 29 that extends through a first chamber 26 and opens into a second chamber 27 and a downstream pipe 32 that extends through the second chamber and the third chamber 28. The upstream opening of the downstream pipe is open to the first chamber and the downstream opening of the downstream pipe is open to the atmosphere. The downstream pipe includes holes 33 in the second chamber.

The foregoing amendment to Claim 1 clarifies that the end portion of the upstream pipe and the end portion of the downstream pipe both open in the expansion room. Claim 1 also requires that the end portion of the upstream pipe and the end portion of the downstream pipe open in the same direction. Inaba does not describe the claimed invention since Inaba does not describe that the upstream pipe and the downstream pipe both open in the same expansion room. Inaba describes that the end of the upstream pipe opens in the second chamber and the end of the downstream pipe that opens in the same direction opens to the atmosphere. The amendment to Claim 1 also clarifies that the end of the downstream pipe opens in the expansion room and the opening in the side face of the downstream pipe is in the expansion room. Inaba does not describe this element of the invention since Inaba describes that the downstream pipe opens to the atmosphere and the openings in the downstream pipe are in the second chamber.

There is no motivation to combine Nilsson and Inaba in the manner suggested by the Examiner. It is believed that the object of the invention described by Inaba is to exhaust gas through two paths which are not horseshoe curved. *See Object of Invention*. Since Nilsson describes an end pipe that is horseshoe curved, there is no motivation to combine Nilsson and Inaba.

Appl. No. 10/783,666
Amndt dated March 26, 2007
Amendment and Response to Office Action dated 12/26/06
Page 7 of 7

RECEIVED
CENTRAL FAX CENTER
MAR 26 2007

Claims 2-4 and 7-17

Claims 2-4 and 7-17 depend from Claim 1 and are patentable for at least the same reasons as Claim 1.

CONCLUSION

In light of the foregoing, it is respectfully submitted that the pending claims are allowable and a notice of allowance is respectfully requested. If there are any issues that can be resolved via a telephone conference, the Examiner is invited to contact Brenda Holmes at 404.685.6799.

Respectfully submitted,



Brenda O. Holmes
Reg. No. 40,339

Kilpatrick Stockton LLP
1100 Peachtree Street
Suite 2800
Atlanta, Georgia 30309
(404) 815-6500
KS File: 44471/297709